



## STAFF REPORT ACTION REQUIRED

### Increased Penalties for Red-Light Running Offences

<b>Date:</b>	March 18, 2008
<b>To:</b>	Public Works and Infrastructure Committee
<b>From:</b>	General Manager, Transportation Services
<b>Wards:</b>	All
<b>Reference Number:</b>	PW08002.tmc (AFS No. 7354)

#### SUMMARY

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To report on the Public Works and Infrastructure Committee request for a review of options for increased enforcement, fines, demerit points, licence suspensions and additional red-light cameras.

#### RECOMMENDATIONS

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The General Manager of Transportation Services recommends that:

1. The increased fines and additional penalties itemized in this report be forwarded to the Ontario Minister of Transportation for consideration and implementation;
2. The General Manager of Transportation Services be requested to include sufficient funds in the Transportation Services 2009 Operating budget submission for a traffic safety awareness campaign; and
3. The City Clerk be requested to forward this report to the City of Toronto's partner municipalities (Cities of Ottawa and Hamilton and the Regional Municipalities of Peel and Waterloo) which operate red-light cameras.

#### FINANCIAL IMPACT

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The recommendations in this report have no financial impact.

#### DECISION HISTORY

At their November 28, 2007 meeting, the Public Works and Infrastructure Committee referred to the General Manager of Transportation Services a motion from Councillor Thompson and Councillor De Baeremaeker to report on increased penalties for red-light running convictions, the installation of additional red-light camera sites and to identify additional measures that can increase the safety of both pedestrians and vehicular traffic at problem intersections.

## ISSUE BACKGROUND

Since the City of Toronto began operating red-light cameras on November 20, 2000, over 74,000 charges have been laid for red-light running at 37 red-light camera locations. Over the same period, the Toronto Police Service laid over 91,000 charges for disobeying traffic control signals. Despite the existing level of enforcement a large number of collisions attributed to red-light running have occurred at all traffic signal locations within the City of Toronto. Since red-light running is a *Highway Traffic Act* offence, application must be made to the Ontario Minister of Transportation to review the current fines and implement other penalties.

## COMMENTS

### 1. Increased Fine and Penalties for Red-Light Running Convictions

When the police apprehend a vehicle driver for red-light running, the driver can be charged under section 144.18 of the Ontario *Highway Traffic Act*. If convicted, the driver will accumulate three demerit points and the set fine of \$180 may be applied.

At red-light camera sites, however, the vehicle owner is charged under section 144.18.1 of the Ontario *Highway Traffic Act*, as the defendant for red-light running offences. If convicted, only the set fine of \$180 may be applied. Demerit points are not accumulated because the vehicle owner, not the vehicle driver was charged with the offence.

Within the Province of Ontario, there is no additional penalty if a vehicle driver or vehicle owner is convicted of multiple red-light running offences or if the red-light running offence results in an injury. In consultation with traffic safety stakeholders, it is agreed that more substantial deterrents are required to reduce red-light running and injuries attributed to red-light running. However, as the establishment of fines and other penalties are associated with the *Highway Traffic Act*, staff have identified the following options for fine and penalty adjustment which should be forwarded for consideration and implementation by the Ontario Minister of Transportation:

Increased Fine / Additional Penalty	Applicable to HTA 144.18 (driver liability offence)	Applicable to HTA 144.18.1 (owner liability offence)
Substantially increase the set fine	√	√
Increase the number of demerit points	√	
Require convicted driver / vehicle owner to attend a traffic regulation refresher training session. The cost of such sessions to be funded by increased fines	√	√
Immediately suspend the drivers licence of a motorist who causes an injury as a result of a red-light running offence	√	
Suspend the drivers licence of drivers convicted of multiple red-light running offences	√	

Increased Fine / Additional Penalty	Applicable to <i>HTA</i> 144.18 (driver liability offence)	Applicable to <i>HTA</i> 144.18.1 (owner liability offence)
Immediately suspend the vehicle licence plate attached to a vehicle which causes an injury resulting from a red-light running offence		√
Suspend the vehicle licence plates of vehicles associated with multiple red-light running convictions		√
Authorize municipalities to publish the licence plate numbers of vehicles associated with red-light running convictions		√

## 2. Additional Red-Light Cameras

Ten red-light cameras rotated between 37 sites have been operating in the City of Toronto since November 2000.

The use of red-light cameras has resulted in significant reductions in the number of collisions at red-light camera locations. For example, a comparison of the five-year-average before the cameras were installed (1995-1999) to the five-year-average after the cameras were installed (2001-2005), shows a decrease of 17 percent in all property damage collisions and 25 percent in all fatal and injury collisions at the camera sites. The most significant reduction was in angle-collisions, with reductions of 60 percent in property damage collisions and 66% in fatal and injury collisions.

At the same time, comparable statistics for collisions at all signalized intersections in Toronto, show an increase in all types of collisions of 40 percent for property damage and a reduction of four percent for fatal and injury collisions. Angle type collisions at all signalized intersections were reduced by 2.5 percent for property damage and 42 percent for fatal and injury collisions.

In view of the proven effect that red-light cameras have had in the reduction of collisions, in May of 2006 City Council approved an expansion of the program, which has been initiated and is underway in the City of Toronto.

The red-light camera program will be expanded from the initial ten cameras in 37 locations, to a total of 98 cameras in 169 locations by the end of 2009. The phasing of the expansion program is outlined in the table below:

Year	Additional Red-light Cameras	Additional Red-light Camera sites	Total Red-light Cameras	Total Red-light Camera sites
2008	57	63	77	100
2009	21	69	98	169

In approving the expansion of the red-light cameras in 2006, City Council also approved the installation of new cameras based on the following general criteria:

- to place new camera sites on the approach of the intersection with a demonstrated right angle collision history that could be addressed by red-light cameras;
- to ensure that the installation of the new red-light cameras is evenly distributed amongst the City’s 44 wards; and
- red-light cameras are rotated so that at least one camera location per ward is active at any time.

In order to properly determine the impact of the red-light camera expansion program, a minimum of two years of data gathering will be required. Consequently, Transportation Services will report back on the operation of the expanded red-light camera program, after that time.

### 3. Additional Traffic Safety Measures

In addition to the red-light cameras, Transportation Services is implementing a number of significant initiatives aimed at increasing the safety of all road users. Some of the initiatives underway include:

Traffic Safety Initiative	Description
Pedestrian Countdown Timers	Numeric count down display at signalized intersections indicating the number of seconds remaining for pedestrians to complete their crossing of a road
Pedestrian Crossover Update	Convert 61 pedestrian crossovers (PXO’s) to traffic signals and update 269 pedestrian crossovers
Broad Pavement Markings	Apply “zebra stripes” to pedestrian crossings at signalized intersections, to heighten drivers awareness of the crosswalk
Accessible Pedestrian Signals	Implement accessible signals to assist visually and sensory challenged pedestrians
Safety and Operational Improvement Program	Geometric improvements to roadways designed to alleviate identified safety and operational problems at specific sites
Public awareness campaigns	Increase public awareness of driver and pedestrian behaviors which increase the risk of collision and injury

Increased seat belt compliance and reduced impaired driving are two examples of driving behavioral changes which have been effected through the combination of continuous enforcement and public education. As a cost containment measure, the City’s traffic safety awareness campaign was interrupted in 2007. However, following consultation with the Toronto Police Service, the General Manager of Transportation Services will investigate options to develop an effective traffic safety awareness campaign in 2008.

## **CONCLUSIONS**

Red-light cameras have reduced the number of collisions at locations where they are used. In 2006 City Council approved the expansion of the program to a total of 98 cameras within 169 sites, which will be evenly distributed amongst the City's 44 wards.

While a significant number of red-light running charges have been laid by the program's Municipal Enforcement Officers as well as Police Officers, additional enforcement and penalty options have to be reviewed. The latter are within the purview of the Ministry of Transportation Ontario and a number of recommended options for penalty and fine adjustments should be forwarded to the Minister for consideration and implementation.

Transportation Services, reviews traffic safety on a continuous and regular basis and implements new programs aimed at increasing the safety of all road users.

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## **SIGNATURE**

Gary Welsh, P.Eng.  
General Manager  
Transportation Services



## STAFF REPORT ACTION REQUIRED

### Contract and Resource Approval Required for Red-Light Camera Operations

<b>Date:</b>	March 18, 2008
<b>To:</b>	Public Works and Infrastructure Committee
<b>From:</b>	General Manager, Transportation Services
<b>Wards:</b>	All
<b>Reference Number:</b>	PW08001.tmc (AFS No. 4063)

#### SUMMARY

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This report summarizes the status of the City of Toronto red-light camera program. The report further requests authority to extend the contract for the operation of the current red-light camera program, authority to enter into a new agreement with the Ontario Ministry of Transportation for access to information required for the expansion of the program as approved by Council and, authority to hire the staff complement necessary to meet the processing requirements of the expanded red-light camera program.

#### RECOMMENDATIONS

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The General Manager, Transportation Services recommends that:

1. Approval be granted to extend Contract No. 9119-00-7004 with Affiliated Computer Systems for the operation and maintenance of existing red-light camera systems for four additional years (November 20, 2008 to November 19, 2012) in the amounts of \$729,900, \$748,200, \$766,900 and \$786,000, respectively and inclusive of taxes, subject to annual budget approval.
2. Approval be granted to enter into an agreement with the Ontario Ministry of Transportation for the access and use of licence plate registration information, for the period 2008–2011, in the estimated amount of \$548,900. Such agreement to be on the terms and conditions as set out in this report and on other terms and conditions satisfactory to the General Manager of Transportation Services and in a form satisfactory to the City Solicitor.

3. Approval be granted to hire four FTEs Municipal Standards Officers and one FTE Supervisor, Red-Light Camera Operations, required to meet the processing requirements of additional red-light cameras being installed as part of the red-light camera expansion program.

## **FINANCIAL IMPACT**

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Funds in the amount of \$3,179,223 (gross) and \$2,848,247 (net) are included in the Transportation Services 2008 Operating Budget submission, in Account TP0393, to fund the existing and expanded red-light camera operations in 2008.

The other municipalities partnering in the red-light camera program, will cover their share of the additional staff costs, at \$56,400. Consequently, the net estimated cost of the additional staff for the City of Toronto is estimated at \$110,800. These funds have been made available in the Traffic Management Centre's 2008 Operating Budget.

Appendix A details the costs and revenues associated with the red-light camera expansion.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

## **DECISION HISTORY**

At its meeting of May 23, 24 and 25, 2006, City Council adopted the recommendations within Clause 18 of Policy and Finance Committee Report No. 4 "Red-Light Camera Operations: Contract Extensions and Request for Proposal 9148-05-5048 for the Supply, Installation, Operation and Maintenance of Red-Light Camera Systems Within the City of Toronto and Other Municipalities Within Ontario", and approved a contract to retain Traffipax Inc. for the supply, installation, operation and maintenance of an additional 88 red-light cameras and 132 sites within the City of Toronto, over a five-year period, from 2007 to 2011.

## **ISSUE BACKGROUND**

The City of Toronto initiated its red-light camera program in November of 2000, with the installation of ten cameras at 37 locations.

A study was conducted in 2006, which compared the five-year average of collision statistics at red-light camera locations during the five years (1995-1999) before installation, to the five-year average for the five years (2000-2005) after red-light camera installation.

The statistics showed a significant reduction in the number of collisions at these locations. The reductions were 17 percent in all property damage collisions and 25 percent in all fatal and injury collisions. Further, the most significant reduction was in right-angle collisions, where reductions of 60 percent in property damage and 66 percent in fatal and injury collisions, were observed.

Comparable statistics for collisions at all signalized intersections, showed an increase of 40 percent for property damage collisions and a reduction of four percent for fatal and injury collisions. During the same time, right-angle collisions at all signalized intersections resulting in property damage were reduced by 2.5 percent and 42 percent for fatal and injury collisions.

Given the proven effect that red-light cameras had in the reduction of collisions, in May of 2006, City Council approved a proposed phased expansion of the program to a total of 98 cameras at 169 locations by the end of 2009. The program expansion has been initiated and is now underway.

Due to delays in the regulatory amendments required to be enacted by the Province, the anticipated number of cameras planned for installation and activation in 2007, was not reached. During the 2008 operating budget review process, the Deputy City Manager of Citizen Centered Services “B” and the General Manager of Transportation Services were directed to report back to the Public Works and Infrastructure Committee in early 2008, on the success of the red-light camera program and the requirements for the expansion phases, to ensure the continued commitment to public safety and the efficient movement of people and goods.

To that effect, the red-light camera phasing plan was modified to accelerate the number of new cameras installed in 2008 to 57 cameras and still reach the original goal of a total of 98 cameras by the end of 2009.

## **COMMENTS**

### Operational Agreement with the Ontario Ministry of Transportation

#### Cost of the Agreement

In approving the red-light camera expansion program in May 2006, Council also directed staff to request the Ontario Ministry of Transportation to provide access to licence plate registration information to the City of Toronto at no cost and, that staff re-negotiate the red-light camera operational agreement with the Ontario Ministry of Transportation.



This agreement is necessary to obtain access to the Provincial motor vehicle registration information, to enable charges to be laid under this program, as well as commitments for compliance with all applicable laws and the responsibilities of each party.

Staff of Transportation Services and Legal Services spent significant time with Ontario Ministry of Transportation staff, to develop a revised costing formula. This new formula, in addition to other efficiencies identified by provincial staff, resulted in a reduction of costs for the period 2006 to 2011, from \$ 4,032,600 to \$ 720,000, resulting in a total cost reduction of \$ 3,312,000 over that period.

### Terms of the Agreement

The operational agreement specifies the responsibilities and requirements of each party. In exchange for licence plate ownership information, the City of Toronto is required to:

- use licence plate registration information solely for the purpose of identifying owners of vehicles which disobey red traffic signals;
- maintain staff and system security provisions to protect confidential information;
- comply with privacy laws;
- post signs at red-light camera sites;
- increase public awareness of the risk of red-light running through traffic safety advertising campaigns;
- report the collision history of monitored sites to the MTO; and
- pay the Province of Ontario fees.

Several provisions of the agreement require specific authority from City Council. These provisions are ones which:

- a) grant the MTO the right to stop providing licence plate registration information to the City at any time without notice. The potential consequences of accepting this provision is that if the interruption is temporary, Transportation Services would have to stop laying red-light running charges until the Ministry resumes the provision of licence plate registration information. If the interruption is permanent, Transportation Services would have to terminate the red-light camera program;
- b) deem the City of Toronto to be in default if the City of Toronto merges with another municipality, submits false or incomplete information to MTO, commits a Privacy breach, fails to make payments or fails to post warning signs. If the City is deemed to be in default, MTO has the right to stop providing licence plate registration information or may cancel the agreement on 60 days notice;

- c) require the City to indemnify the Government of Ontario in respect of any damages, losses or claims that may arise as a result of a the breach of privacy or as a result of the use of inaccurate information which has been provided by the Province to the City. Under this provision, the City could be liable to third parties and the Province if it properly and through no negligence of its own relied on and used faulty information supplied by the Province; and
- d) grants MTO the right to adjust its fees in order to cover all costs to the Province of Ontario related to Red-Light Camera Systems. Although the relationship between the parties has been and continues to be good, under this provision, the City could potentially be charged with unexpected and unspecified future fees if the Province's cost of the operating the system were to change. The City would be able to terminate the agreement if the fees changed in an unacceptable way.

Failure by the City to meet these provisions may result in a termination of the agreement either by the City or the Province. A termination of the agreement would result in the loss of the investment made by the City to reduce red-light running.

#### Extension of the existing red-light camera maintenance and operation contract

The City of Toronto owns the equipment which operates the existing ten red-light cameras and 37 locations. The system was acquired from Affiliated Computer Systems (ACS) in November of 2000 and the original maintenance program has been extended to end in November of 2008.

However, as the City owns the current red-light camera equipment, it is sound to continue its use until it is no longer functional or too costly to repair.

ACS has been requested to provide costs for the extension of the operation and maintenance of the existing red-light camera system from 2008 until 2012. The quotation, proposes a reduction in the cost of 35 percent from \$1,147,300 in 2007, to \$743,500 in 2008. Each year after that, the contract would increase by 2.5 percent until the end of 2012.

#### Status of the expansion of the red-light camera program

The expansion of the red-light camera program approved by Council in 2006 was awarded to Traffipax Inc.

The red-light camera program will be expanded from the current ten cameras in 37 locations, to a total of 98 cameras in 169 locations by the end of 2009.

Due to delays in the enactment of amendments to the Regulations of the Provincial Highway Traffic Act, necessary to initiate the expansion of the red-light camera program, the operation of new red-light cameras, was delayed from 2006 until September of 2007. However, the number of red-light cameras to be installed and activated in 2008 and 2009 has been accelerated to complete the expansion within the originally planned schedule. The phasing of the expansion program, from the ten cameras and 37 sites in 2007, is outlined in the table below:

Year	Additional Red Light Cameras	Additional Red Light Camera sites	Total Red Light Cameras	Total Red Light Camera sites
2008	57	63	77	100
2009	21	69	98	169

### Required Staff Resources

In addition to its own program, the City of Toronto operates a centralized municipal processing centre on behalf of the other municipalities in Ontario which also have a red-light camera program. These municipalities are: City of Ottawa, City of Hamilton, Regional Municipality of Peel and Regional Municipality of Waterloo. The partnering municipalities share in the cost of staffing required to operate the centralized municipal processing centre.

These municipalities have also embarked in an expansion of their program so that they will increase the total number of red-light cameras under their jurisdiction from six in 2007 to 43 in 2009. Therefore, including the expansion of the City of Toronto's program, the overall number of red-light cameras in the Province of Ontario will increase from 16 in 2007 to 141 in 2009.

There is a legislative requirement to lay a red-light running charge, within 23 days of the offence taking place and provide the Courts with the required documentation.

The current staff resources for the program are three FTEs Municipal Standards Officers. To meet the noted legislative and contractual requirements that will be imposed by the expansion of the red-light camera program in 2008, four additional Municipal Standards Officers and one Supervisor, Red-Light Camera Operations will have to be hired.

It is important to note that while the salaries for the additional staff place a pressure on the Operating Budget of Transportation Services, the revenues that are collected by Court Services from fines levied against red-light camera runners, result in a total net revenue of \$ 4,264,500 for the City budget, between 2008 and 2012. Details are shown in Appendix "A" to this report.

## **CONCLUSIONS**

Based upon the reduction of injury collisions which can be attributed to red-light running, at the existing red-light camera sites, City Council approved the expansion of red-light cameras and red-light camera sites, in May 2006.

The provincial regulations required to operate the new red-light camera systems are now in place, permitting the new red-light camera sites to be installed and an amended cost distribution formula to reduce the City's cost to access to the provincial vehicle registration system has been negotiated.

Additional staff resources are required in order to process charges for red-light running at the new red-light camera sites and to meet the legislated deadlines detailed within this report. The red-light camera program is estimated to be self-funding.

The new agreement with the Province and estimates of revenue from fines, are estimated to result in net revenue of approximately \$ 4,265,000 for the term of the program (2008-2012).

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## **SIGNATURE**

Gary Welsh, General Manager  
Transportation Services

## **ATTACHMENTS**

Appendix A: Cost, Revenue, and Schedule Tables

**Appendix A  
Cost, Revenue, and Schedule Tables**

The estimates included in this Appendix assume that the ACS and Traffipax contracts are amended in order to operate all planned red-light camera systems until the end of 2012. The estimates also assume that the funding for the additional staff required beyond 2008 is approved.

**Gross Project Cost Estimates – 2008 - 2012**

Component	2008	2009	2010	2011	2012	Total
Operate Existing RLC's – ACS	\$743,400	\$729,900	\$748,200	\$766,900	\$786,000	\$3,774,400
Operate RLC Expansion – Traffipax	\$1,485,900	\$3,413,000	\$3,413,000	\$3,413,000	\$3,413,000	\$15,137,900
Provincial Costs	\$145,200	\$136,900	\$133,400	\$133,400	\$133,400	\$682,300
Operate Processing Centre - including staff, equipment, public awareness and postage	\$804,700	\$1,065,700	\$1,119,000	\$1,175,000	\$1,233,700	\$5,398,100
Court Services	\$300,000	\$400,000	\$400,000	\$400,000	\$400,000	\$1,900,000
<b>Gross Project Cost</b>	<b>\$3,479,200</b>	<b>\$5,745,500</b>	<b>\$5,813,600</b>	<b>\$5,888,300</b>	<b>\$5,966,100</b>	<b>\$26,892,700</b>

**Project Revenue Estimates – 2008 - 2012**

Component	2008	2009	2010	2011	2012	Total
Municipal Revenue	\$283,000	\$292,100	318,0100	\$318,000	\$318,000	\$1,529,100
Fine Revenue	\$5,500,000	\$8,434,200	\$6,347,600	\$6,196,100	\$3,150,200	\$29,628,100
<b>Total Revenue Estimate</b>	<b>\$5,783,000</b>	<b>\$8,726,300</b>	<b>\$6,665,600</b>	<b>\$6,514,100</b>	<b>\$3,468,200</b>	<b>\$31,157,200</b>

**Net Project Cost Estimates – 2008 - 2012**

	2008	2009	2010	2011	2012	Total
<b>Net Cost</b>	<b>\$(2,303,800)</b>	<b>\$(2,980,800)</b>	<b>\$(852,000)</b>	<b>\$(625,800)</b>	<b>\$2,497,900</b>	<b>\$(4,264,500)</b>

### Operate Existing Red-Light Cameras – Affiliated Computer Systems:

The existing contract with Affiliated Computer Systems covers the operation and maintenance of the existing ten red-light camera units rotated among 37 prepared sites. The operation and maintenance activities include the supply, loading and unloading, development and delivery of photographic film, the rotation and maintenance of the camera units and the operation and maintenance of image processing hardware and software stations and printers.

### Red-Light Camera System Expansion – Traffipax:

The installation schedule for the expansion of red-light cameras in the City of Toronto includes a total of 88 red-light cameras which will be rotated among 132 new sites over the five-year period, as shown in the following table.

Number of New Red-light Cameras and Camera Sites Installed in the City of Toronto

Year	2008	2009	2010	2011	2012	Total
Number of New Red-Light Cameras	57	21	0	0	0	78
Total Red-Light Cameras	77	98	98	98	98	98
Number of New Red-Light Camera Sites	63	69	0	0		132
Total Red-Light Camera Sites	100	169	169	169	169	169
Average Number of Months New Cameras Are Operating in Installed Year	5	8	12	12	12	

The estimated yearly cost of the contract with Traffipax Inc. increases as the number of new red-light camera sites is increased to 132. In addition to the supply and installation of the 132 new red-light camera sites, contract costs include operations and maintenance activities which include loading and unloading red-light cameras, delivery of digital files for processing and the rotation and maintenance of the camera units.

#### Provincial Costs:

Access to the Province of Ontario's motor vehicle registration information, which is necessary to lay charges under this program, requires that participating municipalities have an operational agreement with the Ontario Ministry of Transportation. The agreement with the Ontario Ministry of Transportation also requires that municipalities identify red-light camera sites by way of traffic signs and that municipalities maintain a public awareness campaign advising of the risks of red-light running. The Ontario Ministry of Transportation has estimated a common fee format for all municipalities. The annual cost fluctuates as the number of red-light cameras is added.

#### Processing Centre Costs:

The City of Toronto operates the joint municipal processing centre which performs several functions including matching photos and plate information, laying of charges by Provincial Offences Officers and assisting Prosecutors by preparing photographic evidence for first attendance and trial. Processing costs include office space, equipment, supplies, postage and the red-light camera operations unit staff.

#### Court Services Division:

The additional annual Court Services Division costs required to fund the increased workload, resulting from additional red-light cameras includes one court room clerk, two court office clerks and one additional prosecutor plus costs for judicial services payable to the Province of Ontario. The 2008 estimate reflects additional staff being required starting the second quarter 2008.

#### Fine Revenue:

The estimated increase in fine revenue reflects the increasing number of new active red-light camera sites that are scheduled to be operational by early 2009. Fine revenue estimates assume a decrease in the frequency of red-light running resulting from the increased number of sites and the increase in public awareness.

Estimated Number of Charges

Year	2007	2008	2009	2010	2011	2012	Total
Estimated Number of Charges Issued	8,433	54,400	65,300	52,200	44,400	37,700	262,433

Net Cost:

Over the next five years, the estimated project revenues exceed costs by approximately \$4,401,100.00. The first 88 new sites will be operated with active cameras which generate revenue. Beginning in 2009, on an annual basis, the net operating cost decreases, as the same number of cameras will be rotated amongst a higher number of sites and as red-light running decreases.